

INDIAN INSTITUTE OF INFORMATION TECHNOLOGY
DESIGN AND MANUFACTURING (IIITDM) KANCHEEPURAM

INTRODUCTION OF NEW COURSE

Course Title	Business analytics and data mining Modeling using R	Course No	MAN506			
Specialization	ALL	Structure (LTPC)	3	0	0	3
To be offered for	UG / PG	Status	Core <input type="checkbox"/>	Elective <input checked="" type="checkbox"/>		
Faculty Proposing the course	N.A.	Type	New <input checked="" type="checkbox"/>	Modification <input type="checkbox"/>		
Date of DAC	N.A.	Members Present in DAC				
Pre-requisite	None	Submitted for approval	40 th Senate			
Learning Objectives	<ul style="list-style-type: none"> Objective of this course is to impart knowledge on use of data mining techniques for deriving business intelligence to achieve organizational goals. Use of R (statistical computing CSS - MOOCs Proposal software) to build, assess, and compare models based on real datasets and cases with an easy-to-follow learning curve. 					
Learning Outcomes	<ul style="list-style-type: none"> Use of R (statistical computing CSS - MOOCs Proposal software) to build, assess, and compare models based on real datasets and cases with an easy-to-follow learning curve 					
Contents of the course (With approximate break-up of hours)	General Overview of Data Mining and its Components, Introduction and Data Mining Process Introduction to R Basic Statistical Techniques (4) Data Preparation and Exploration Visualization, Techniques (3) Data Preparation and Exploration Visualization, Techniques Dimension Reduction Techniques Principal Component Analysis (4) Performance Metrics and Assessment Performance Metrics for Prediction and Classification (4) Supervised Learning Methods Multiple Linear Regression (4) Supervised Learning Methods Naïve Bayes (4) Supervised Learning Methods Classification & Regression Trees (4) Supervised Learning Methods Logistic Regression (4) Artificial Neural Networks (4) Supervised Learning Methods (4) Discriminant Analysis (3)					
Reference	<ol style="list-style-type: none"> Data Science and Big Data Analytics: Discovering, Analyzing, Visualizing and Presenting Data by EMC, Education Services (2015) Data Mining for Business Intelligence: Concepts, Techniques, and Applications in Microsoft Office Excel with XLMiner by Shmueli, G., Patel, N. R., & Bruce, P. C. (2010) https://nptel.ac.in/noc/individual_course.php?id=noc19-mg26 					